

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte Brian Eric Bakke, Timothy Jerry Schimke, Joseph Thomas Writz

Appeal No. _____
Application No. 09/932,140

SUPPLEMENTAL APPEAL BRIEF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Brian Eric Bakke et al. Art Unit: 2113
Application No.: 09/932,140 Examiner: Joseph D. Manoskey
Filed: August 17, 2001
For: METHOD AND APPARATUS FOR PROVIDING REDUNDANT ACCESS TO A
SHARED RESOURCE WITH A SHAREABLE SPARE ADAPTER

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL APPEAL BRIEF

I. REAL PARTY IN INTEREST

This application is assigned to International Business Machines Corporation, of Armonk, New York.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF CLAIMS

Claims 1-29 are pending in the Application. Claims 1-29 stand rejected and are now on appeal. Claims 7 and 28 have each been amended once, claims 1 and 15 have each been amended four times, claim 29 has been amended five times, and claim 30 has been canceled.

IV. STATUS OF AMENDMENTS

There have been no amendments filed subsequent to the final rejection mailed May 5, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Applicants' invention is generally directed to improving the reliability of access to a shared resource. The invention enables access to the shared resource by controlling a shareable spare adapter. The spare adapter may be configured to replace any of a plurality of access adapters providing access the shared resource. As such, program code of one embodiment may initiate a substitution of the shareable spare adapter as necessary for any of the plurality of the access adapters. The embodiment accomplishes the substitution by reassigning correlation tokens from an access adapter to the shareable spare adapter. Prior to reassigning correlation tokens, the embodiment may disable both the access and shareable spare adapters (Application, page 5, lines 5-15).

Program code consistent with the invention may execute the substitution upon the detection of an event. One such event may embody a change in a heartbeat signal emanating from an access adapter. As such, the embodiment may continually monitor the network for the event, and additionally initiate notification procedures in response to signal silence. In this manner, program code may initiate the replacement or servicing of an access adapter. A host network may then evaluate newly assigned tokens of the shareable spare adapter to reconnect with the shared resource. Significantly, these feature may be accomplished without burdening host servers with undue processing requirements (Application, page 5, lines 16 to page 6, line 2; and page 13, lines 1 and 2).

Specific support for the claimed subject matter for the independent claims as a whole has been provided above. Additional support for the claimed subject matter of the independent claims may also generally be found, for example, in Figs 2-4, and at pages 19, lines 11 to page 23, line 11, among other portions of the Application as filed. However, a direct mapping of the aforementioned discussion to the individual independent and dependent claims is presented below:

Independent Claim 1

An apparatus (Application, Fig. 2, page 28, line 14), comprising:
a plurality of access adapters (Application, Fig. 2, blocks 32, 36, 40, 42, page 10, lines 11-14), each adapter configured to interface with an electronic resource (Application, Fig. 2, block 17, page 10, lines 16 and 17);
at least one shareable spare adapter (Application, Fig. 2, block 52, page 14, line 15) configured to function as a network interface that removably couples with the electronic resource (Application, Fig. 2, blocks 17 and 52, page 16, lines 7-9); and
control circuitry configured to initiate a substitution of the shareable spare adapter for any of the plurality of access adapters to supplant a substituted access adapter without intervention by any server in electronic communication with the electronic resource (Application, Fig. 2, blocks 17 and 19, page 9, lines 1-6; page 13, lines 1 and 2).

Dependent Claim 2

An apparatus according to claim 1, wherein the control circuitry initiates the substitution in response to an event (Application, Fig. 4, block 92, page 5, lines 16-18).

Dependent Claim 3

An apparatus according to claim 2, wherein the control circuitry initiates monitoring of the event (Application, Fig. 3, block 60, page 19, lines 12-14).

Dependent Claim 4

An apparatus according to claim 2, wherein the control circuitry initiates notification procedures regarding the event (Application, Fig. 3, block 70, page 23, lines 5-7).

Dependent Claim 5

An apparatus according to claim 2, wherein the event includes a change in a heartbeat signal transmitted by an access adapter (Application, Fig. 3, block 62, page 19, lines 20-21).

Dependent Claim 6

An apparatus according to claim 2, wherein the control circuitry initiates monitoring a process that monitors the event (Application, Fig. 4, block 90, page 24, lines 1-4).

Dependent Claim 7

An apparatus according to claim 1, wherein a port of an access adapter of the plurality of access adapters interfaces with only a subset of the electronic resource (Application, Fig. 2, blocks 17, 32, 36, 40, page 10, lines 11-17).

Dependent Claim 8

An apparatus according to claim 1, wherein the control circuitry initiates a reconfiguration of an access adapter into a second shareable spare adapter (Application, Fig. 3, block 72, page 21, lines 11-12).

Dependent Claim 9

An apparatus according to claim 1, wherein the control circuitry initiates a removal of a correlation token from an access adapter (Application, Fig. 3, blocks 64, 66, page 20, lines 18-20).

Dependent Claim 10

An apparatus according to claim 9, wherein the control circuitry initiates an assignment of the correlation token to the shareable spare adapter (Application, Fig. 3, block 72, page 21, lines 14-16).

Dependent Claim 11

An apparatus according to claim 9, wherein the control circuitry initiates an evaluation of the correlation token (Application, Fig. 3, block 80, page 22, lines 8-10).

Dependent Claim 12

An apparatus according to claim 1, wherein the control circuitry initiates a replacement of an access adapter (Application, Fig. 3, block 70, page 23, lines 5-7).

Dependent Claim 13

An apparatus according to claim 1, wherein the control circuitry initiates a disablement of the shareable spare adapter (Application, Fig. 3, block 62, page 21, lines 1-3).

Dependent Claim 14

An apparatus according to claim 1, wherein the control circuitry initiates disabling an access adapter (Application, Fig. 3, block 76, page 23, lines 12-14).

Independent Claim 15

A method of providing access to a computer resource (Application, Fig. 2, block 17, page 10, lines 16 and 17), wherein a plurality of access adapters each interface with the computer resource (Application, Fig. 2, block 17, page 10, lines 16 and 17), the method comprising using a shareable spare adapter (Application, Fig. 2, block 52, page 14, line 15) configured to function as a network interface that removably couples with the computer resource (Application, Fig. 2, blocks 17 and 52, page 16, lines 7-9) and to supplant an interface provided by a first adapter of the plurality of access adapters (Application, Fig. 2, blocks 17 and 19, page 9, lines 1-6), wherein the shareable spare adapter is additionally configured to supplant a second interface provided by a second access adapter of the plurality of access adapters without intervention by any server in electronic communication with the computer resource (Application, Fig. 2, blocks 17 and 19, page 9, lines 1-6; page 13, lines 1 and 2).

Dependent Claim 16

The method according to claim 15, wherein the shareable spare adapter is additionally configured to supplant a third interface provided by any of the plurality of access adapters (Application, Fig. 2, blocks 32, 36, 40, 42, 52, page 17, lines 7-9).

Dependent Claim 17

The method according to claim 15, further comprising supplanting the interface in response to an event (Application, Fig. 4, block 92, page 5, lines 16-18).

Dependent Claim 18

The method according to claim 17, further comprising monitoring of the event (Application, Fig. 3, block 60, page 19, lines 12-14).

Dependent Claim 19

The method according to claim 17, further comprising initiating notification procedures regarding the event (Application, Fig. 3, block 70, page 23, lines 5-7).

Dependent Claim 20

The method according to claim 17, further comprising monitoring a process that monitors the event (Application, Fig. 4, block 90, page 24, lines 1-4).

Dependent Claim 21

The method according to claim 15, further comprising reconfiguring the first access adapter into a second shareable spare adapter (Application, Fig. 3, block 72, page 21, lines 11-12).

Dependent Claim 22

The method according to claim 15, further comprising removing a correlation token from the second access adapter (Application, Fig. 3, blocks 64, 66, page 20, lines 18-20).

Dependent Claim 23

The method according to claim 22, further comprising assigning the correlation token to the shareable spare adapter (Application, Fig. 3, block 72, page 21, lines 14-16).

Dependent Claim 24

The method according to claim 22, further comprising evaluating the correlation token (Application, Fig. 3, block 80, page 22, lines 8-10).

Dependent Claim 25

The method according to claim 15, further comprising replacing the second access adapter (Application, Fig. 3, block 70, page 23, lines 5-7).

Dependent Claim 26

The method according to claim 15, further comprising disabling the shareable spare adapter (Application, Fig. 3, block 62, page 21, lines 1-3).

Dependent Claim 27

The method according to claim 15, further comprising disabling the second access adapter (Application, Fig. 3, block 76, page 23, lines 12-14).

Dependent Claim 28

The method according to claim 15, wherein each of the first and second adapters access a different subset of the computer resource (Application, Fig. 2, blocks 17, 32, 36, 40, page 10, lines 11-17).

Independent Claim 29

A program product (Application, page 29, lines 16-18), comprising:
a program for providing access to a computer resource (Application, Fig. 2, block 17, page 10, lines 16 and 17), wherein a plurality of access adapters each interface with the computer resource (Application, Fig. 2, block 17, page 10, lines 16 and 17), the program configured to use a shareable spare adapter (Application, Fig. 2, block 52, page 14, line 15) configured to function as a network interface that removably couples with the computer resource (Application, Fig. 2, blocks 17 and 19, page 9, lines 1-6) and to supplant an interface provided by a first adapter of the

plurality of access adapters (Application, Fig. 2, blocks 17 and 52, page 16, lines 7-9), wherein the shareable spare adapter is additionally configured to supplant a second interface provided by a second access adapter of the plurality of access adapters without intervention by any server in electronic communication with the computer resource (Application, Fig. 2, blocks 17 and 19, page 9, lines 1-6; page 13, lines 1 and 2); and

a computer-readable signal bearing recordable media (Application, page 29, line 14 to page 30, line 4) bearing the program.

Other features are recited in the dependent claims, and will be discussed in greater detail in the arguments section below. In addition, it should be noted that, as none of the claims recite any means plus function or step plus function elements, no identification of such elements is required pursuant to 37 CFR §41.37(c)(1)(v), nor is any summary of the claimed subject matter of any separately argued dependent claim required.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

- A. Claims 1-8, 12-21 and 25-30¹ stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent No. 5,987,621 to Duso et al. (*Duso*) in view of U.S. Patent No. 6,408,343 to Erickson et al. (*Erickson*).
- B. Claims 9-11 and 22-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Duso* in view of *Erickson* in view of U.S. Patent No. 5,964,887 to Conseil (*Conseil*).

VII. ARGUMENT

Applicants respectfully submit that the Examiner's rejections of claims 1-29 are not supported on the record, and should be reversed. In summary, the Examiner has failed to

¹ Although ¶ 2 of the Office Action lists claims 1-8, 12-21 and 25-30 in the rejection, Claim 30 was canceled in the Amendment and Response dated March 2, 2006, as correctly indicated on the Office Action Summary. Claim 30 will therefore not be addressed in this Appeal Brief.

appreciate the differences between a claimed adapter and a server, despite the fact that such distinctions are expressly recited in the claims, are generally known in the art and are clearly shown in the cited art, itself.

Discouragingly, Applicants have attempted on at least five previous occasions without real success to clarify this distinction (between an adapter and a computer) to the Examiner. Interviews, Responses and Amendments have laid out distinguishing functions and features of an adapter, e.g., providing access to a computer, while not comprising a computer, itself. As defined by the American Heritage Dictionary: an adapter is a hardware device, such as a printed circuit board, that enables a personal computer to use additional peripheral devices or hardware. Put another way, an adapter is not a computer, itself, but enables a computer to access a peripheral device. This definition seems to Applicants to be as clear as that of a “server,” (as defined by Webster) “a computer in a network that provides services to other computers in the network.” Put another, way, a server is a computer (which an adapter is not).

In face of such clear definitions to the contrary, the Examiner has nonetheless continued to “interpret” the server computers of the primary reference as adapters. Disappointingly, the Examiner has maintained this position, even though his, own cited prior art takes pains to distinguish between adapters and computers, as outlined below. In that sense, the Examiner’s stance on a computer server equating to an adapter is a metaphor for his entire argument, ignoring the plain meaning of the claim language for an interpretation that is contrary to general knowledge, express claim language, and the cited, art, itself.

Applicants will hereinafter address the Examiner's rejections in the general order presented in the Final Office Action. Within the discussion of each rejection, the various claims that are the subject of the Examiner's rejections will further be addressed in order, starting with the independent claims, and then addressing various dependent claims reciting additional subject matter that is distinguishable from the prior art of record. In some cases, specific discussions of particular claims are not made in the interests of streamlining the appeal. The omission of a discussion with respect to any particular claim, however, should not be interpreted as an acquiescence as to the merits of the Examiner's rejection of the claim, particularly with respect to

claims reciting features that are addressed in connection with the rejections applied to other claims pending in the appeal.

A. Claims 1-8, 12-21 and 25-29 are non-obvious over *Duso* in view of *Erickson*.

Applicants respectfully submit that the Examiner's §103(a) rejections of claims 1-8, 12-21 and 25-29 based upon *Duso* and *Erickson* are not supported on the record, and should be reversed, given that the Examiner has failed to establish a *prima facie* case of obviousness as to any of these claims. A *prima facie* showing of obviousness requires that the Examiner establish that the differences between a claimed invention and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. §103(a). Such a showing requires that all claimed features be disclosed or suggested by the prior art. Such a showing also requires objective evidence of the suggestion, teaching or motivation to combine or modify prior art references, as "[c]ombining prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight." In re Dembiczak, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

Applicants respectfully submit that, in the instant case, the Examiner has failed to establish a *prima facie* case of obviousness as to the aforementioned claims, and as such, the rejections thereof should be reversed.

Independent Claims 1, 15 and 29

The Examiner argues that the combination of *Duso* and *Erickson* render claims 1, 15 and 29 obvious. Applicants respectfully submit, however, that the cited prior art fails to motivate, suggest or anywhere disclose the features recited in these claims, e.g., providing access for a host device to a shared resource via a spare adapter configured to replace any of a plurality of access adapters, and therefore the Examiner's rejection under 35 U.S.C. §103(a) should be reversed. Applicants will discuss method claim 1 prior to discussing claims 15 and 29 (directed respectively to a method and a program product).

Claim 1 generally recites an apparatus that includes a plurality of access adapters, each adapter configured to interface with an electronic resource, at least one shareable spare adapter configured to function as a network interface that removably couples with the electronic resource, and control circuitry configured to initiate a substitution of the shareable spare adapter for any of the plurality of access adapters to supplant a substituted access adapter without intervention by any server in electronic communication with the electronic resource.

Duso is directed to a failover mechanism that detects the failure of a server computer and causes another computer to take on the work of the failed computer (column 2, lines 40-45). *Duso* does not teach shareable spare adapters (which are inherently different from server computers)², let alone substitution using a shareable spare adaptor without intervention by any server in electronic communication with the resource. In contrast, *Duso* teaches a failover technique that uses a control server 29 to effectuate failover of a failed stream server 21 (column 10, lines 15-28). That is, at least a control server 29 and a stream server 21 must intervene to accomplish a replacement process (*id.*).

Nonetheless, the Final Office Action asserts that *Duso* includes a server computer that can be interpreted as an adapter. Applicants respectfully traverse this characterization. The cited portions of *Duso* merely teach a failover technique concerning a failed server computer, which is irrelevant to the shareable spare adapter of claim 1.

The failure of *Duso* to teach or suggest the limitations of claim 1 speaks to the disparate purposes of the prior art reference when compared to that of the present invention. Namely, *Duso* is directed to server computers, not adapters, as claimed by Applicants. *Duso*, itself presents this distinction in its own specification in a manner that is consistent with the definitions of adapters and servers as described in Applicants' specification. For example, Fig. 2 of *Duso* shows adapters 50 that comprise physical connections linking server computers 21, 28 and 29 (column 8, lines 26-28). These adapters 50 are clearly shown and described as being distinct

² The cited art presents this distinction in its own specification in a manner that is consistent with the definitions of adapters and servers as described in Applicants' specification. For example, Fig. 2 of *Duso* shows adapters 50 that comprise physical connections linking server computers 21, 28 and 29 (column 8, lines 26-28). *Erickson* describes known differences between adapters and computers at column 1, lines 52-62.

from the server computers 21, 28 and 29, likewise leaving no room for “interpretation”(column 7, lines 8-10).

Of note, while features of Applicants' invention may complement and improve conventional computer systems like that disclosed in *Duso* (by supplanting and/or augmenting conventional adapters 50), it cannot be properly said that the server computers 21, 28 and 29 of *Duso* suggest or motivate the shareable spare adapters as recited in claim 1.

The Examiner does concede on page 3 of the Final Office Action that *Duso* does not teach “without intervention by a server in electronic communication with the electronic resource.” To address this deficiency, Examiner asserts that it would have been obvious to combine the self-configuring adapters of *Erickson* with the shareable spare servers (shareable adapters) of *Duso*. Again, there is no motivation to supplant the servers of *Duso* with adapters (of *Erickson*). *Erickson*, itself, at column 1, lines 52-62 differentiates an adapter from a computer, such as in *Duso*. Moreover, while *Duso* is concerned with network server redundancy, *Erickson* does not make a single mention of “server” or “network.” This is because *Erickson* is rather concerned with multiple adapters 450, 470 within the same physical housing, or enclosure 402, as shown in Fig. 6 and as described at column 5, lines 54-65. As such, there is no motivation to combine the physically encased and local adapters of *Erickson* with the networked server computers of *Duso*.

Furthermore, even if such a combination was motivated (which it is not), it would still hypothetically only result in a system with the servers of *Duso* being coupled to the adapters of *Erickson*. That is, the adapters, not the servers of *Duso*, would be replaced by the adapters of *Erickson*.

Accordingly, Applicants respectfully submit that claim 1 is non-obvious over *Duso*, *Erickson* and the other cited prior art of record. Reversal of the Examiner's rejection, and allowance of claim 1, are therefore respectfully requested.

Next, with respect to independent claims 15 and 29, which respectively recite a method and a program product, each of these claims recite processes regarding a plurality of access adapters, each adapter configured to interface with an electronic resource, at least one shareable spare adapter configured to function as a network interface that removably couples with the

electronic resource, and control circuitry configured to initiate a substitution of the shareable spare adapter for any of the plurality of access adapters to supplant a substituted access adapter without intervention by any server in electronic communication with the electronic resource. Accordingly, Applicants respectfully submit that claims 15 and 29 are non-obvious over the cited prior art of record for the same reasons as claim 1. Reversal of the Examiner's rejections, and allowance of claims 15 and 29, are therefore respectfully requested.

Dependent Claims 2 and 17

Dependent claims 2 and 17 respectively depend from claims 1 and 15, and each recites initiating the substitution in response to an event. In rejecting these claims, the Examiner asserts that *Duso* and *Erickson* disclose this feature. As discussed herein, however, the cited prior art does not suggest or motivate shareable, spare adapters, let alone a substitution of an adapter in response to an event. Reversal of the Examiner's rejections, and allowance of claims 2 and 17, are therefore respectfully requested.

Dependent Claims 3 and 18

Dependent claims 3 and 18 respectively depend from claims 2 and 17, and each recites monitoring of the event. As discussed herein, *Duso* and *Erickson* do not suggest or motivate shareable, spare adapters, let alone monitoring an event that precedes a substitution of an adapter. Reversal of the Examiner's rejections, and allowance of claims 3 and 18, are therefore respectfully requested.

Dependent Claims 4 and 19

Dependent claims 4 and 19 respectively depend from claims 2 and 17, and each recites initiating a notification in response to the event. As discussed herein, *Duso* and *Erickson* do not suggest or motivate shareable, spare adapters, let alone generating a notification in response to an event that precedes a substitution of an adapter. Reversal of the Examiner's rejections, and allowance of claims 4 and 19, are therefore respectfully requested.

Dependent Claim 5

Dependent claim 5 respectively depends from claim 2, and recites initiating a notification in response to the event. As discussed herein, *Duso* and *Erickson* do not suggest or motivate shareable, spare adapters, let alone generating a notification in response to an event that precedes a substitution of an adapter. Reversal of the Examiner's rejections, and allowance of claim 5, are therefore respectfully requested.

Dependent Claims 6 and 20

Dependent claims 6 and 20 respectively depend from claims 2 and 17, and each recites initiating a notification in response to the event. As discussed herein, *Duso* and *Erickson* do not suggest or motivate shareable, spare adapters, let alone monitoring a process that monitors an event that precedes a substitution of an adapter. Reversal of the Examiner's rejections, and allowance of claims 6 and 20, are therefore respectfully requested.

Dependent Claims 7 and 28

Dependent claims 7 and 28 depend from claims 1 and 15, respectively, and generally recite accessing a subset(s) of the electronic resource. The cited *Duso* figure merely shows an electronic resource, and does not motivate or suggest the feature. Reversal of the Examiner's rejection and allowance of claims 7 and 28, are therefore respectfully requested.

Dependent Claim 8 and 21

Dependent claims 8 and 21 depends respectively from claims 1 and 15, and generally recite control circuitry for reconfiguring an access adapter into a second, shareable spare adapter. As discussed herein, *Duso* and *Erickson* do not suggest or motivate shareable, spare adapters (as opposed to servers), let alone reconfiguring an adapter to be a second, shareable spare adapter. Reversal of the Examiner's rejection and allowance of claims 8 and 21, are therefore respectfully requested.

Dependent Claims 12 and 25

Dependent claims 12 and 25 depend respectively from claims 1 and 15, and regard replacement of an access adapter. The combination of *Duso* and *Erickson* does not motivate or suggest this feature. Reversal of the Examiner's rejection and allowance of claims 12 and 25, are therefore respectfully requested.

Dependent Claims 13 and 26

Dependent claims 12 and 25 depend respectively from claims 1 and 15, and regard replacement of an access adapter. The combination of *Duso* and *Erickson* does not motivate or suggest this feature. Reversal of the Examiner's rejection and allowance of claims 13 and 26, are therefore respectfully requested.

Dependent Claims 14 and 27

Dependent claims 14 and 27 depend respectively from claims 1 and 15, and regard disabling an access adapter. The combination of *Duso* and *Erickson* motivates or suggests, at best, manipulating a server, not affecting, let alone disabling, an adapter. Reversal of the Examiner's rejection and allowance of claims 14 and 27, are therefore respectfully requested.

Dependent Claim 16

Dependent claim 16 depends from claim 15, and includes that the shareable spare adapter is additionally configured to supplant a third interface provided by any of the plurality of access adapters. As discussed above, the combination of *Duso* and *Erickson* neither motivates nor suggests a shareable spare adapter, let alone such shareable spare adapter configured to supplant first, second and third interfaces. Reversal of the Examiner's rejection and allowance of claim 16, are therefore respectfully requested.

B. Claims 9-11 and 22-24 non-obvious over *Duso*, *Erickson* and *Conseil*.

Applicants' respectfully submit that dependent claims 9-11 and 22-24 are allowable by virtue of their respective dependence from claims 1 and 15, as discussed above. That is, the claims are non-obvious over *Duso* and *Erickson* in view of *Conseil* at least because there is no

suggestion in the references, or elsewhere in the cited prior art, of an apparatus or method providing access for a host device to a shared resource via a spare adapter configured to replace any of a plurality of access adapters.³

Conseil does not address these shortcomings of *Duso* and *Erickson*, as discussed above. Rather, *Conseil* is directed to a method for selecting a desired switching station during a telecommunications routing operation. Significantly, *Conseil* does not teach, suggest or even mention an adapter. Similar to the primary reference, *Duso*, *Conseil* is unconcerned with the operation of adapters. As a consequence, no combination of the prior art suggests or motivates a shareable spare adapter.

Conseil is nonetheless cited in an attempt to remedy the deficiency acknowledged by the Examiner on page 9 of the Final Office Action: that the combination of *Duso* and *Erickson* also fails to suggest the claimed correlation token. The claimed correlation token may be removed from a faulty adapter and be reassigned to the shareable, spare adapter to accomplish the substitution. Hypothetically taken out of the presently claimed context of adapters (which Applicants contend cannot be properly done), the disclosure of a “token” in *Conseil* consists merely of a binary register permanently assigned to a station (column 1, lines 62-64). That is, the token is merely a binary identifier that is contained in persistent memory of an active telecommunications station (column 1, lines 47-50). The status of the token, i.e., present or absent, indicates whether a backup station is operational (column 1, lines 62-64). This limited functionality of a token in *Conseil* is patentably distinct from that of the claimed correlation token, as discussed below.

Dependent Claims 9 and 22

Dependent claims 9 and 22 depend respectively from claims 1 and 15, and include the removal of a correlation token from an access adapter. The token in *Conseil* is permanently

³As stated above in connection with independent claims 1, 15 and 29, a *prima facie* showing of obviousness requires that the Examiner establish that the differences between a claimed invention and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. §103(a).

stored within persistent memory, and neither suggests nor motivates removal (column 1, lines 47-50). For at least this reason, reversal of the Examiner's rejection and allowance of claims 9 and 22, are therefore respectfully requested.

Dependent Claims 10 and 23

Dependent claims 10 and 23 depend respectively from claims 1 and 15, and include assigning the correlation token to a shareable, spare adapter. As discussed herein, no adapter is motivated or suggested by the cited art. Moreover, the token/identifier of *Conseil* is not assigned. The token rather comprises a part of permanent, unassignable memory making up the switching station (column 1, lines 47-50). Reversal of the Examiner's rejection and allowance of claims 10 and 23, are therefore respectfully requested.

Dependent Claims 11 and 24

Dependent claims 11 and 24 depend respectively from claims 1 and 15, and include evaluating the correlation token. As discussed herein, the cited art does not suggest or motivate a correlation token, as claimed, let alone an evaluation of a correlation token. Reversal of the Examiner's rejection and allowance of claims 11 and 24, are therefore respectfully requested.

VIII. CONCLUSION

In conclusion, Applicants respectfully request that the Board reverse the Examiner's rejections of claims 1-29, and that the Application be passed to issue. If there are any questions

regarding the foregoing, please contact the undersigned at 513/241-2324. Moreover, if any other charges or credits are necessary to complete this communication, please apply them to Deposit Account 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.

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IX. CLAIMS APPENDIX: CLAIMS ON APPEAL (S/N 09/932,140)

1. (Previously Presented) An apparatus, comprising:
a plurality of access adapters, each adapter configured to interface with an electronic resource;
at least one shareable spare adapter configured to function as a network interface that removably couples with the electronic resource; and
control circuitry configured to initiate a substitution of the shareable spare adapter for any of the plurality of access adapters to supplant a substituted access adapter without intervention by any server in electronic communication with the electronic resource.
2. (Original) An apparatus according to claim 1, wherein the control circuitry initiates the substitution in response to an event.
3. (Original) An apparatus according to claim 2, wherein the control circuitry initiates monitoring of the event.
4. (Original) An apparatus according to claim 2, wherein the control circuitry initiates notification procedures regarding the event.
5. (Original) An apparatus according to claim 2, wherein the event includes a change in a heartbeat signal transmitted by an access adapter.
6. (Original) An apparatus according to claim 2, wherein the control circuitry initiates monitoring a process that monitors the event.
7. (Previously Presented) An apparatus according to claim 1, wherein a port of an access adapter of the plurality of access adapters interfaces with only a subset of the electronic resource.
8. (Original) An apparatus according to claim 1, wherein the control circuitry initiates a reconfiguration of an access adapter into a second shareable spare adapter.

9. (Original) An apparatus according to claim 1, wherein the control circuitry initiates a removal of a correlation token from an access adapter.

10. (Original) An apparatus according to claim 9, wherein the control circuitry initiates an assignment of the correlation token to the shareable spare adapter.

11. (Original) An apparatus according to claim 9, wherein the control circuitry initiates an evaluation of the correlation token.

12. (Original) An apparatus according to claim 1, wherein the control circuitry initiates a replacement of an access adapter.

13. (Original) An apparatus according to claim 1, wherein the control circuitry initiates a disablement of the shareable spare adapter.

14. (Original) An apparatus according to claim 1, wherein the control circuitry initiates disabling an access adapter.

15. (Previously Presented) A method of providing access to a computer resource, wherein a plurality of access adapters each interface with the computer resource, the method comprising using a shareable spare adapter configured to function as a network interface that removably couples with the computer resource and to supplant an interface provided by a first adapter of the plurality of access adapters, wherein the shareable spare adapter is additionally configured to supplant a second interface provided by a second access adapter of the plurality of access adapters without intervention by any server in electronic communication with the computer resource.

16. (Original) The method according to claim 15, wherein the shareable spare adapter is additionally configured to supplant a third interface provided by any of the plurality of access adapters.

17. (Original) The method according to claim 15, further comprising supplanting the interface in response to an event.

18. (Original) The method according to claim 17, further comprising monitoring of the event.

19. (Original) The method according to claim 17, further comprising initiating notification procedures regarding the event.

20. (Original) The method according to claim 17, further comprising monitoring a process that monitors the event.

21. (Original) The method according to claim 15, further comprising reconfiguring the first access adapter into a second shareable spare adapter.

22. (Original) The method according to claim 15, further comprising removing a correlation token from the second access adapter.

23. (Original) The method according to claim 22, further comprising assigning the correlation token to the shareable spare adapter.

24. (Original) The method according to claim 22, further comprising evaluating the correlation token.

25. (Original) The method according to claim 15, further comprising replacing the second access adapter.

26. (Original) The method according to claim 15, further comprising disabling the shareable spare adapter.

27. (Original) The method according to claim 15, further comprising disabling the second access adapter.

28. (Previously Presented) The method according to claim 15, wherein each of the first and second adapters access a different subset of the computer resource.

29. (Previously Presented) A program product, comprising:
a program for providing access to a computer resource, wherein a plurality of access adapters each interface with the computer resource, the program configured to use a shareable spare adapter configured to function as a network interface that removably couples with the computer resource and to supplant an interface provided by a first adapter of the plurality of access adapters, wherein the shareable spare adapter is additionally configured to supplant a second interface provided by a second access adapter of the plurality of access adapters without intervention by any server in electronic communication with the computer resource; and
a computer-readable signal bearing recordable media bearing the program.

30. (Canceled)

IX. EVIDENCE APPENDIX

09/932,140

None.

X. RELATED PROCEEDINGS APPENDIX

09/932,140

None.